

COMMUNICATIONS PRODUCTS AGREEMENT NO. P-7288-05

AMENDMENT FIVE

This Amendment Five to Agreement No. P-7288-05 is made this 8th day of November, 2004, by and between Motorola, Inc. (Motorola) and the City of Phoenix (City). The Agreement shall be amended as follows:

1. Per the terms of **Section 3.6, TECHNOLOGY UPGRADES**, Motorola further agrees to provide the XTS 1500 portable radio. Price sheets and specifications are provided in Exhibits I and J, respectively, attached hereto and incorporated by reference.

Other than the amended terms set forth herein, the terms and conditions of the Agreement shall remain unchanged and in full force and effect.

The Effective Date of this Amendment shall be November 8, 2004.

MOTOROLA, INC.

By: [Signature]
Title: AREA CONTROLLER

CITY OF PHOENIX, a municipal corporation
FRANK A. FAIRBANKS
City Manager

By: [Signature]
Danny W. Murphy
Chief Information Officer



ATTEST:

[Signature]
City Clerk

APPROVED AS TO FORM:

[Signature]
Acting City Attorney

[Signature]
CITY CLERK DEPT.
2004 NOV 19 AM 10:46

XTS 1500 700/800 MHz Basic Portable		UNIT PRICES FOR QUANTITIES INDICATED - see Section 1.11							(Special Offer)
Baseline Model: XTS 1500 - All items listed below are options available when ordering the radio. The attached catalog sheet includes items that can be ordered independent of the radio.		(Qty 1-9)	(Qty 10-49)	(Qty 50-99)	(Qty 100-499)	(Qty 500-999)	(Qty 1000-4999)	(Qty 5000 and above)	
Radio, Project 25, 800 MHz, Personal/Portable		\$ 1,576.67	\$ 1,576.67	\$ 1,576.67	\$ 1,542.54	\$ 1,508.42	\$ 1,474.29	\$ 1,406.04	\$ 1,337.79
PORTABLE ASTRO DIGITAL XTS 1500 764-870MHZ 1-3W 16 CHANNEL									
ENH: SOFTWARE TRUNKING 9600 BAUD									
Charger, 110V US TRI Chemistry									
ENH: TWO (2) YEAR EXPRESS SERVICE PLAN									
Complete list of available options, accessories, and services, refer to section 1.2.2, 1.12.1, and 11.6.2. Attach catalog pricing with % discount.									
Delete battery, refer to section 1.12.1		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DEL: BATTERY ALTOGETHER		\$ (51.30)	\$ (51.30)	\$ (51.30)	\$ (50.16)	\$ (49.02)	\$ (47.88)	\$ (45.60)	\$ (43.32)
Delete user manual, refer to section 1.12.1		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Delete features, refer to section 1.12.1. Attach price sheets.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Test and Programming Equipment, refer to section 1.2.4 and 1.11.2. Attach price sheets.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Test and Programming Cables, refer to section 1.11.2. Attach price sheets.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Test and Programming Software, refer to section 1.11.2. Attach price sheets.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance training, refer to section 1.7. Attach price sheets.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
User training, refer to section 1.7. Attach price sheets.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Extended warranty term options, refer to section 1.8.1. Attach price sheets.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Necessary firmware/software fix per unit, refer to section 1.5.3.1		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Optional upgrade per unit, refer to section 1.5.3.2		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Upgrade price (bulk), refer to section 1.5.3.3		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Lifetime software per unit, refer to section 1.5.3.4		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other firmware/software prices, refer to section 1.5.1. Attach price sheets.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
On-site programming and testing, refer to section 1.6.1. Attach price sheets.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PER UNIT ON-SITE PROGRAMMING (SEE SECTION 13 FOR DETAILS)		\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00	\$ 25.00
Zero Receive Volume Option, refer to section 12.5.2		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Basic Battery, refer to section 12.6.1		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Optional Antennas, refer to section 12.6.2. Attach price sheets.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Delete Antenna		\$ (9.00)	\$ (9.00)	\$ (9.00)	\$ (8.80)	\$ (8.60)	\$ (8.40)	\$ (8.00)	\$ (7.60)
ALT: 806-870 MHZ DIPOLE (NAF5039A)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ALT: ANTENNA QUARTER-WAVE 800MHZ (NAF5042)		\$ (4.50)	\$ (4.50)	\$ (4.50)	\$ (4.40)	\$ (4.30)	\$ (4.20)	\$ (4.00)	\$ (3.80)
ALT: ANTENNA WHIP FLEX 700 / 800MHZ (NAF5080)		\$ 4.50	\$ 4.50	\$ 4.50	\$ 4.40	\$ 4.30	\$ 4.20	\$ 4.00	\$ 3.80
Optional Batteries, refer to section 12.6.2. Attach price sheets.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ALT: BATTERY NICAD FM 1525MAH (NTN9816)		\$ 44.10	\$ 44.10	\$ 44.10	\$ 43.12	\$ 42.14	\$ 41.16	\$ 39.20	\$ 37.24
ALT: BATTERY ULTRA HI CAPACITY NIMH (NTN9858)		\$ 54.90	\$ 54.90	\$ 54.90	\$ 53.68	\$ 52.46	\$ 51.24	\$ 48.80	\$ 46.36
ALT: BATTERY NIMH FM 1750MAH (NTN9857)		\$ 73.80	\$ 73.80	\$ 73.80	\$ 72.16	\$ 70.52	\$ 68.88	\$ 65.60	\$ 62.32

Attachment I

City of Phoenix

Price Sheets

XTS 1500 700/800 MHz Basic Portable		UNIT PRICES FOR QUANTITIES INDICATED - see Section 1.11							(Special Offer)
Baseline Model: XTS 1500 - All items listed below are options available when ordering the radio. The attached catalog sheet includes items that can be ordered independent of the radio.		(Qty 1-9)	(Qty 10-49)	(Qty 50-99)	(Qty 100-499)	(Qty 500-999)	(Qty 1000-4999)	(Qty 5000 and above)	
Optional Clips, refer to section 12.6.2. Attach price sheets.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Optional Battery Chargers, refer to section 12.6.2. Attach price sheets.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Optional Portable to Mobile radio converters/chargers, refer to section 12.6.2. Attach price sheets.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Optional RF power capability, refer to section 12.6.2. Attach price sheets.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Optional microphones, refer to section 12.6.2. Attach price sheets.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Optional loud speakers, refer to section 12.6.2. Attach price sheets.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

XTS 1500 Portable

Accessories: Apply 30% Discount excluding APC Codes: 557, 964, 606, 185, 261, 262, 371, 415. Batteries, Radio Service and Programming Software, Test Equipment and Shop Supplies are also excluded from discounting.

Antenna

Description	Nomenclature	APC	Price
ANTENNA, 806-870 MHZ 1/2 WAVELENGTH WHIP	NAF5037	476	\$35.75
ANTENNA, DIPOLE 806-870MHZ	NAF5039	476	\$35.75
ANTENNA, 806-941MHZ 1/4 WAVELENGTH WHIP (STUBBY)	NAF5042	476	\$25.50
ANTENNA, 764-870MHZ 1/4 WAVE WHIP FLEX	NAF5080	555	\$35.00

Belt Clip(s)

Description	Nomenclature	APC	Price
BELT CLIP 2 1/4"	HLN6853	271	\$10.00

Cable(s)

Description	Nomenclature	APC	Price
CABLE- PROGRAMMING USB	RKN4105	261	\$225.00
DOES NOT require Smart Rib. This cable MUST be ordered or the RKN4106 when you order the RVN4186 to program the Portable Radios.			
CABLE- PROGRAMMING, RS232	RKN4106	261	\$239.00
This cable MUST be ordered or the RKN4105 when you order the RVN4186 to program the Portable Radios.			

XTS 1500 Portable

Accessories: Apply 30% Discount excluding APC Codes: 557, 964, 606, 185, 261, 262, 371, 415. Batteries, Radio Service and Programming Software, Test Equipment and Shop Supplies are also excluded from discounting.

Carrying Case(s)**Description**

LEATHER CASE W/HIGH ACTIVITY 3.0" SWIVEL BELT LOOP

Includes swivel belt loop and t-strap. 3.0" Snap NiCad or NiMH.

LEATHER CASE W/HIGH ACTIVITY 2.5" SWIVEL BELT LOOP

Includes swivel belt loop and t-strap. 2.5" Snap NiCad or NiMH.

LEATHER CASE W/ SNAP BELT LOOP & T-STRAP

Includes snap belt loop and t-strap. For NiCad or NiMH.

T-STRAP LEATHER PLAIN ACTION SNAPS

T-STRAP CASE LEATHER HARD ACTION SNAPS

Nomenclature	APC	Price
NNTN4115	271	\$60.00
NNTN4116	271	\$60.00
NNTN4117	271	\$60.00
NTN8383	476	\$10.50
NTN8384	476	\$10.50

Charger**Description**

CHARGER 110V US TRI CHEMISTRY

CHARGER, 230V EURO TRI CHEMISTRY

CHARGER 230V UK TRI CHEMISTRY

CHARGER, IMPRESS SMART RAPID RATE, 110V

Rapid charger, NiCad, NiMH, & Lithium batteries are for ALL XTS, MTS, MT, JT, HT, and Saber batteries. (WPLN4114AR, & USA 3004209T03 Cord)

CHARGER, IMPRESS SMART RAPID RATE, 220V (EURO)

Rapid charger, NiCad, NiMH, & Lithium batteries are for ALL XTS, MTS, MT, JT, and HT (WPLN4114AR, 2 prong Euro 3004209T01 Cord)

CHARGER, IMPRESS SMART RAPID RATE, 240V (UK)

Rapid charger, NiCad, NiMH, & Lithium batteries are for ALL XTS, MTS, MT, JT, HT, and Saber batteries. (WPLN4114AR, 3 prong Euro Flat 3004209T02 Cord)

CHARGER TRAVEL

Utilizes the cigarette lighter adapter. INCLUDES: mounting bracket, custom coil cord, and charger.

Nomenclature	APC	Price
NTN1667	476	\$100.00
NTN1668	476	\$100.00
NTN1669	476	\$165.00
NTN1873	476	\$165.00
NTN1874	785	\$165.00
NTN1875	785	\$165.00
RLN4884	785	\$95.00

XTS 1500 Portable

Accessories: Apply 30% Discount excluding APC Codes: 557, 964, 606, 185, 261, 262, 371, 415. Batteries, Radio Service and Programming Software, Test Equipment and Shop Supplies are also excluded from discounting.

Earpieces**Description****EARBUD, MINI MICROPHONE AND PTT**

*MTX8000 & MTX9000 - Requires BDN6676 (3.5 mm adapter jack) that attaches to the radio. Assembled with microphone & PTT. *EX500 & EX600 XLS - requires PMLN4455 - Intrinsically Safe (FM).

EARBUD, RECEIVE ONLY, BLACK (SINGLE WIRE)

*HT1000, JT1000, MT2000, MTX8000, MTX9000, XTS 3000, requires BDN6676 (3.5mm adapter jack) that attaches to the radio. *EX500 & EX600 XLS - requires PMLN4455 - Intrinsically Safe (FM) *XTS 5000 & XTS 2500 requires new adaptor-available Q1 2002. Intrinsically Safe (FM). Assembled (receive only) with volume control & standard urethane earloop.

Nomenclature	APC	Price
BDN6780	742	\$67.00
BDN6781	742	\$27.00

Headsets**Description****HEADSET VOICE ACTIVATED-(VOX) HEAVY DUTY W/NOISE CANCELLING BOOM MIC**

*Saber radio requires BDN6640 Adapter Cable. *HT1000, JT1000, MT2000, XTS3000, XTS3500, XTS2500, XTS5000 -use with BDN6673. Intrinsically Safe (FM). *XTS2500 & XTS5000-NOT Intrinsically Safe (FM). *EX500 & EX600 XLS - use with RKN4093.
Note: VOX is not recommended for trunking operation.

HEADSET HEAVY DUTY W/NOISE CANCELLING BOOM MICROPHONE, PTT ON EARCU

*Saber radio requires BDN6640 Adapter Cable. *HT1000, JT1000, MT2000, XTS3000, XTS3500, XTS2500, XTS5000 -use with BDN6673. Intrinsically Safe (FM). *EX500 & EX600 XLS - use with RKN4093.

CABLE, RADIO ADAPTER, HT1000

*XTS 2500, XTS 3000, & XTS 5000 Requires BDN6645. *HT1000, JT1000, & MT2000 - requires one of the following: BDN6645, BDN6635, or BDN6636.

HEADSET OVER-THE-HEAD FOR HT AND MT RADIOS

Medium Weight Headset, Over the Head, with In-Line PTT - Noise Reduction Rating = 24dB

HEADSET BEHIND-THE-HEAD FOR HT AND MT RADIOS

Medium Weight Headset, Behind the Head, with In-Line PTT - Noise Reduction Rating = 24dB

TEMPLE TRANSDUCER W/BOOM MIC & PTT-RECEIVE AUDIO THROUGH THE TEMPLES

Temple transducer-receive audio without covering the ear; behind the head style headset allows user to receive audio through the temples. Headset features a noise cancelling boom microphone and in-line PTT.

Nomenclature	APC	Price
BDN6635	742	\$906.00
BDN6645	742	\$439.00
BDN6673	505	\$205.00
NMN6258	742	\$389.00
NMN6259	505	\$425.00
RMN4049	742	\$225.00

Attachment I

XTS 1500 Portable

Accessories: Apply 30% Discount excluding APC Codes: 557, 964, 606, 185, 261, 262, 371, 415. Batteries, Radio Service and Programming Software, Test Equipment and Shop Supplies are also excluded from discounting.

Microphones

Description	Nomenclature	APC	Price
MICROPHONE REMOTE SPEAKER NOISE CANCELLING	NMN6191	476	\$96.75
Includes a 6.0' coiled cord assembly, 3.5 mm earjack, swivel clip, quick disconnect latch - Intrinsically Safe (FM).			
MICROPHONE REMOTE SPEAKER	NMN6193	476	\$87.25
Includes a 6.0' (stretched length) coiled cord, swivel clothing clip and 3.5mm earpiece, quick disconnect latch - Intrinsically Safe (FM).			

Multi Unit Chargers

Description	Nomenclature	APC	Price
WALL MOUNT KIT FOR MULTI-UNIT CHARGER	NLN7967	476	\$21.00
CHARGER, RACK MOUNT FOR 6 UNIT	NLN7968	476	\$26.00
CHARGER IMPRES DISPLAY MODULE	RLN5591A	785	\$173.00
Retrofit for display module on impres Multi Unit Charger versions 1.2 or earlier. Instruction sheet will be supplied. Requires the charger to be sent to the Radio Support Center for module installation/flash upgrade. Includes return shipping. Quantity discounts apply when purchasing more than one.			
CHARGER IMPRES SMART MULTI UNIT (110V)	WPLN4108 R	785	\$788.00
CHARGER IMPRES SMART MULTI UNIT W/ DISPLAY MODULES (110V)	WPLN4130	785	\$1,350.00
Displays the following information "real-time for impres batteries - mAh, % capacity, time remaining to charge complete (NiCd/NiMH only), battery s/n, charge status, voltage, kit#, and more. Supports NiCd, NiMH, and Lithion impress and Motorola non-impres batteries.			

Service

Description	Nomenclature	APC	Price
HOUSING ELIMINATOR, XTS 2500, XTS 1500	8180384M37	261	\$307.00
BATTERY ELIMINATOR CABLE	AA0180305G54	261	\$60.00

Surveillance

Description	Nomenclature	APC	Price
EARPIECE RECEIVE ONLY WITH STANDARD EARPHONE - BEIGE (SINGLE WIRE)	BDN6664	742	\$40.00

XTS 1500 Portable

Accessories: Apply 30% Discount excluding APC Codes: 557, 964, 606, 185, 261, 262, 371, 415. Batteries, Radio Service and Programming Software, Test Equipment and Shop Supplies are also excluded from discounting.

*HT1000, JT1000, MT2000, MTX8000, MTX9000, XTS 2500, XTS 3000, & XTS 5000: REQUIRE BDN6676(3.5mm adapter jack) that attaches to the radio. If being used with Remote Speaker Microphone with 3.5mm audio jack, audio adapter is not required. Assembled (receive only) with standard urethane ear loop. *EX500 & EX600 XLS - requires PMLN4455 -Intrinsically Safe (FM)

EARPIECE RECEIVE ONLY WITH EXTRA LOUD EARPHONE - BEIGE (SINGLE WIRE)	BDN6665	742	\$42.00
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*HT1000, JT1000, MT2000, MTX8000, MTX9000, XTS 2500, XTS 3000, & XTS 5000: REQUIRE BDN6676(3.5mm adapter jack) that attaches to the radio. If being used with Remote Speaker Microphone with 3.5mm audio jack, audio adapter is not required. Assembled (receive only) with standard urethane ear loop. *EX500 & EX600 XLS - requires PMLN4455 -Intrinsically Safe (FM)

EARPIECE RECEIVE ONLY WITH VOLUME CONTROL - BEIGE (SINGLE WIRE)	BDN6666	742	\$53.00
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*HT1000, JT1000, MT2000, MTX8000, MTX9000, XTS 2500, XTS 3000, and XTS 5000: Requires BDN6676(3.5mm adapter jack) that attaches to the radio. If being used with Remote Speaker Microphone with 3.5mm audio jack, audio adapter is not required. Intrinsically Safe (FM). Assembled (receive only) with standard urethane ear loop.

EARPIECE WITH MICROPHONE & PTT COMBINED - BEIGE (2 WIRE)	BDN6667	742	\$114.00
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*HT1000, JT1000, MT2000, MTX8000, MTX9000, XTS 2500, XTS 3000, and XTS 5000: Requires BDN6676(3.5mm adapter jack) that attaches to the radio. If being used with Remote Speaker Microphone with 3.5mm audio jack, audio adapter is not required. Intrinsically Safe (FM). Assembled (receive only) with standard urethane ear loop.

EARPIECE WITH MICROPHONE & PTT SEPARATE - BEIGE (3 WIRE)	BDN6668	742	\$150.00
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*HT1000, JT1000, MT2000, MTX8000, MTX9000, XTS 2500, XTS 3000, and XTS 5000: Requires BDN6676(3.5mm adapter jack) that attaches to the radio. If being used with Remote Speaker Microphone with 3.5mm audio jack, audio adapter is not required. Intrinsically Safe (FM). Assembled (receive only) with standard urethane ear loop.

EARPIECE, MIC & PTT COMBINED W/EXTRA LOUD EARPIECE - BEIGE (2 WIRE)	BDN6669	742	\$118.00
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*HT1000, JT1000, MT2000, MTX8000, MTX9000, XTS 2500, XTS 3000, and XTS 5000: Requires BDN6676(3.5mm adapter jack) that attaches to the radio. If being used with Remote Speaker Microphone with 3.5mm audio jack, audio adapter is not required. Intrinsically Safe (FM). Assembled (receive only) with standard urethane ear loop.

EARPIECE W/MIC & PTT SEPARATE W/XTRA LOUD EARPIECE - BEIGE (3 WIRE)	BDN6670	742	\$135.00
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*HT1000, JT1000, MT2000, MTX8000, MTX9000, XTS 2500, XTS 3000, and XTS 5000: REQUIRE BDN6676(3.5mm adapter jack) that attaches to the radio. If being used with Remote Speaker Microphone with 3.5mm audio jack, audio adapter is not required. Intrinsically Safe (FM). Assembled (receive only) with standard urethane ear loop. *EX500 & EX600 XLS REQUIRES PMLN4455.

EARPIECE RECEIVE ONLY WITH STANDARD EARPHONE - BLACK (SINGLE WIRE)	BDN6726	742	\$40.00
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*HT1000, JT1000, MT2000, MTX8000, MTX9000, and XTS 3000 require BDN6676 (3.5 mm adapter jack) that attaches to the radio. If being used with Remote Speaker Microphone with 3.5mm audio jack, audio adapter is not required. *XTS 2500 and XTS 5000 requires new adaptor which will be available Q1 2002. Intrinsically Safe (FM) *EX500 & EX600 XLS - requires PMLN4455 - Intrinsically Safe (FM)

EARPIECE RECEIVE ONLY WITH VOLUME CONTROL - BLACK (SINGLE WIRE)	BDN6728	742	\$53.00
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*JT1000, MT2000, MTX8000, MTX9000, and XTS 3000 require BDN6676 (3.5 mm adapter jack) that attaches to the radio. If being used with Remote Speaker Microphone with 3.5mm audio jack, audio adapter is not required. *XTS 2500 and XTS 5000 requires new adaptor which will be available Q1 2002. Intrinsically Safe (FM). *EX500 & EX600 XLS - requires PMLN4455 - Intrinsically Safe (FM)

EARPIECE WITH MICROPHONE & PTT COMBINED - BLACK (2 WIRE)	BDN6729	742	\$114.00
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*JT1000, MT2000, MTX8000, MTX9000, and XTS 3000 require BDN6676 (3.5 mm adapter jack) that attaches to the radio. *XTS 2500 and XTS 5000 requires new adaptor which will be available Q1 2002. Intrinsically Safe (FM). *EX500 & EX600 XLS - requires PMLN4455 - Intrinsically Safe (FM)

EARPIECE WITH MICROPHONE & PTT SEPARATE - BLACK (3 WIRE)	BDN6730	742	\$150.00
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Attachment I

XTS 1500 Portable

Accessories: Apply 30% Discount excluding APC Codes: 557, 964, 606, 185, 261, 262, 371, 415. Batteries, Radio Service and Programming Software, Test Equipment and Shop Supplies are also excluded from discounting.

*HT1000, JT1000, MT2000, MTX8000, MTX9000 XTS 3000 require BDN6676 (3.5mm adapter jack) that attaches to the radio. *XTS 2500 & XTS 5000 requires new adaptor-available Q1 2002. Intrinsically Safe (FM). *EX500 & EX600 XLS - requires PMLN4455 - Intrinsically Safe (FM)

EARPIECE, MIC & PTT COMBINED W/EXTRA LOUD EARPIECE - BLACK (2 WIRE)	BDN6731	742	\$118.00
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*HT1000, JT1000, MT2000, MTX8000, MTX9000 XTS 3000, require BDN6676 (3.5mm Adapter Jack) that attaches to the radio. *XTS 2500 & XTS 5000 requires new adaptor-available Q1 2002. Intrinsically Safe (FM). *EX500 & EX600 XLS - requires PMLN4455 - Intrinsically Safe (FM)

EARPIECE W/MIC & PTT SEPARATE W/XTRA LOUD EARPIECE - BLACK (3 WIRE)	BDN6732	742	\$135.00
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*HT1000, JT1000, MT2000, MTX8000, MTX9000 XTS 3000 require BDN6676 (3.5mm adapter jack) that attaches to the radio. *XTS2500 & XTS5000 requires new adaptor-available Q1 2002. Intrinsically Safe (FM). *EX500 & EX600 XLS - requires PMLN4455 - Intrinsically Safe (FM).

Customer Programming Software

Description	Nomenclature	APC	Price
SOFTWARE FOR ASTRO 25 PORTABLE CD FORMAT; VERSION R01.00.00	RVN4181	371	\$265.00

CD Format. This software will program XTS 5000 & XTS 2500 Portable radios plus this comes with a tuner utility on the disk. This provides 3yrs worth of support.

Manuals

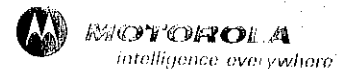
Description	Nomenclature	APC	Price
MANUAL BASIC SERVICE LEVEL 1-2 XTS 1500, 2500, AND MT 1500	6881094C09	205	\$13.75
XTS2500, XTS1500, MT1500 BASIC SERVICE MANUAL PAPER			
MANUAL DETAILED SERVICE/THEORY LEVEL 3 XTS 1500, 2500, AND MT 1500	6881094C10	205	\$31.75
XTS2500, XTS1500, MT1500 BASIC SERVICE MANUAL PAPER			
MANUAL CD SERVICE ENGLISH XTS 1500, 2500, AND MT 1500	9985899D01	001	\$10.50
XTS2500, XTS1500, MT1500 BASIC SERVICE MANUAL PAPER			
MANUAL CD SERVICE AND THEORY ENGLISH XTS 1500, 2500, AND MT 1500	9985900D01	362	\$31.75
XTS2500, XTS1500, MT1500 BASIC SERVICE MANUAL PAPER			

XTS 1500 Portable

Accessories: Apply 30% Discount excluding APC Codes: 557, 964, 606, 185, 261, 262, 371, 415. Batteries, Radio Service and Programming Software, Test Equipment and Shop Supplies are also excluded from discounting.

Battery				
Description		Nomenclature	APC	Price
BATTERY, ULTRA HIGH CAPACITY NICAD, 1525MAH(-30C) Compatible with XTS 2500, MT 1500, and XTS 1500		NTN9815	453	\$50.00
BATTERY NICAD, FM 1525MAH (-30C) Compatible with XTS 2500, MT 1500 and XTS 1500		NTN9816	453	\$54.00
BATTERY NIMH, FM 1750MAH (-20C) FM D,F,G ULTRA HIGH CAPACITY Compatible with XTS 2500, MT 1500 and XTS 1500		NTN9857	453	\$58.00
BATTERY NIMH, 1800MAH (-20C)* Compatible with XTS 2500, MT 1500, and XTS 1500		NTN9858	453	\$52.00

XTS 1500 DIGITAL PORTABLE RADIO



AFFORDABILITY IN ACTION. DURABILITY TO DEPEND ON. SIMPLICITY THAT SUCCEEDS.

Motorola's XTS 1500 portable radio is the cost-effective, convenient, compact solution for public works and public utilities. This high-quality APCO Project 25 radio features two-way functionality in a durable, dependable unit that is very easy to use.

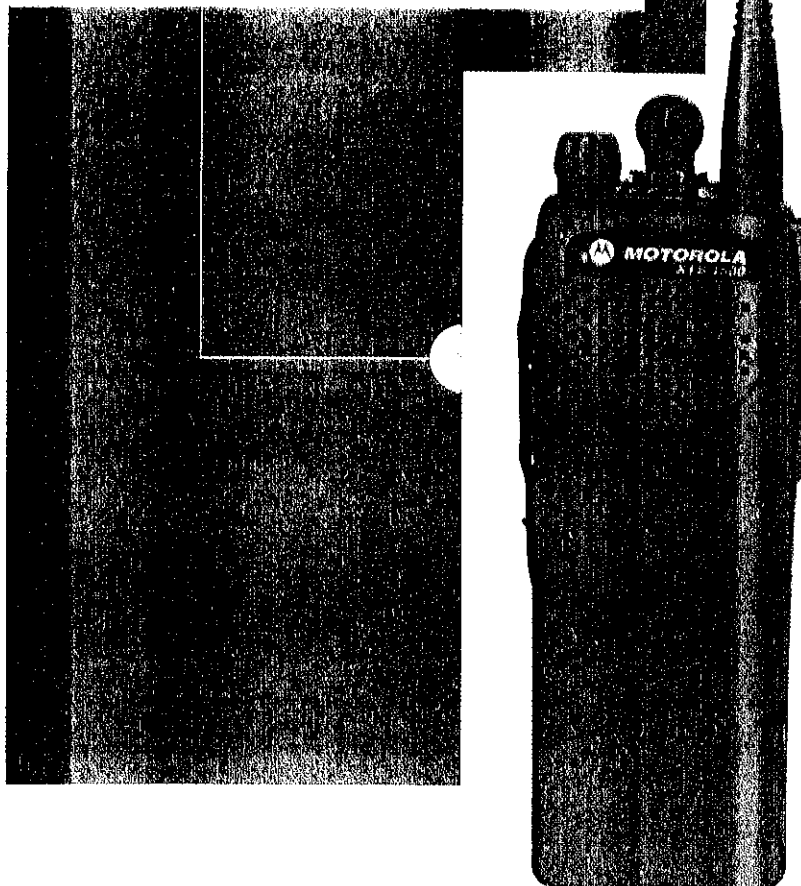
Available in the 700/800 frequency band, the XTS 1500 portable supports both APCO Project 16 and Project 25 operation. Use the analog functionality on the XTS 1500 or migrate to limited wide-area Project 25 operation. Look for VHF and UHF band additions in the coming year.

For true simplicity, affordability and reliability make the right call with the XTS 1500 digital radio from Motorola.



XTS 1500 PORTABLE RADIO FEATURES:

- Available in 700/800 frequency band (764-870 MHz)
- 3-watt power
- Supports APCO Project 16 (3600 control channel) and APCO Project 25 (9600 control channel)
- Works with ASTRO® Analog and Digital Trunking with Mutual Aid or ASTRO 25 Digital Trunking with Mutual Aid
- Meets Military Standards 810 C, D and E
- Utilizes Customer Programming Software and supports USB and RS-232
- Compatible with XTS 3000, XTS 3500, XTS 2500, HT 1000, MT 1000 and MTS 2000 portable radio accessories
- Supports enhanced audio features: noise reduction software and audio gain control



For more information, contact 1-800-367-2346
or visit www.motorola.com/cgiss.

HC-4-2003

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Attachment J

GENERAL SPECIFICATIONS

Frequency Range	764-870 MHz
Power Supply	7.5 V
Dimensions (mm) (HxWxD)	
Less Battery	152.4 x 58.4 x 25.4
With NiCd Ultra-High Capacity	152.4 x 58.4 x 50.8
With NiMH Ultra-High Capacity	152.4 x 58.4 x 50.8
Weight (oz)	
Less Battery	10.50
With NiCd Ultra-High Capacity	18.60
With NiMH Ultra-High Capacity	20.10
Average Battery Life (hr)	
With NiCd Ultra-High Capacity	8
With NiMH Ultra-High Capacity	12

TRANSMITTER

Guaranteed Performance Specifications

Frequency Range	700 MHz: 764-767, 773-776, 794-797, 803-806 MHz 800 MHz: 806-824, 851-870 MHz
RF Power Output	700 MHz: 3 W max 800 MHz: 3 W min
Frequency Stability (-30°C to +60°C)	-1.5 PPM
Modulation Limiting	
12.5 kHz chnl	±2.5 kHz
25 kHz chnl	±5.0 kHz
Modulation	C4FM / FM
Channel Spacing	12.5 / 25 kHz
FM Hum & Noise Radio	
25 kHz	-40 dB
12.5 kHz	-31 dB
Conducted / Radiated Emissions	-13 dBm
Audio Response (0.3-3 kHz)	+1 to -3 dB
Audio Distortion	3.0%

FACTORY MUTUAL APPROVALS

Factory Mutual has given the XTS 1500™ Portable an intrinsically safe rating for use in Classes I, II, and III, Division 1, Groups C, D, E, F, and G, as well as non-incendive use in Class I, Division II, Groups A, B, C, and D on models ordered with the Factory Mutual option.

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-30°C / +60°C
Storage Temperature	-40°C / +85°C
Humidity	Per MIL-STD
ESD	IEC 801-2 KV
Water & Dust Intrusion	IP54, MIL-STD

RECEIVER

Guaranteed Performance Specifications

Frequency Range	700 MHz: 764-767, 773-776 MHz 800 MHz: 851-870 MHz
Hum and Noise	-40 dB
Sensitivity EIA	.35 µV
Sensitivity ETS	.50 µV
Sensitivity (5% BER)	.35 µV
Channel Spacing	12.5 / 25 kHz
Adjacent Channel Selectivity	Analog: 70 dB (25 K) 65dB (12.5 K) Digital: 60 dB (12.5 K)
Intermodulation per EIA	70 dB
Spurious Rejection	70 dB
Rated Audio	0.5 W
Audio Distortion @ Rated Audio	3%
Audio Response (0.3-3 kHz)	+1 to -3dB
Conducted Spurious Emission	-57dBm < 1 GHz -47 dBm > 1 GHz

PORTABLE MILITARY STANDARDS 810 C, D, E & F

	MIL-STD 810C		MIL-STD 810D		MIL-STD 810E		MIL-STD 810F	
	Method	Proc./Cat.	Method	Proc./Cat.	Method	Proc./Cat.	Method	Proc./Cat.
Low Pressure	500.1	I	500.2	II	500.3	II	500.4	II
High temperature	501.1	I, II	501.2	I/A1, II/A1	501.3	I/A1, II/A1	501.4	I/Hot, II/Hot
Low Temperature	502.1	I	502.2	I/C3, II/C1	502.3	I/C3, II/C1	502.4	I/C3, II/C1
Temperature Shock	503.1	-	503.2	I/A1C3	503.3	I/A1C3	503.4	I
Solar Radiation	505.1	II	505.2	I	505.3	I	505.4	I
Rain	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, III
Humidity	507.1	II	507.2	II	507.3	II	507.4	-
Salt Fog	509.1	-	509.2	-	509.3	-	509.4	-
Blowing Dust	510.1	I	510.2	I	510.3	I	510.4	I
Vibration	514.2	VIII/F, Curve-W	514.3	I/10, II/3	514.4	I/10, II/3	514.5	I/24
Shock	516.2	I, II	516.3	I, IV	516.4	I/IV	516.5	I, IV



Motorola's Commercial, Government and Industrial Solutions Sector is a recipient of the prestigious 2002 Malcolm Baldrige National Quality Award. This honor demonstrates our commitment to performance excellence and quality achievement.



MOTOROLA

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Specifications subject to change without notice.

R3-4-2007

Specification Sheet**XTS 1500™
Digital Portable Radio**
MOTOROLA
intelligence everywhere™
**AFFORDABILITY IN
ACTION. DURABILITY TO
DEPEND ON. SIMPLICITY
THAT SUCCEEDS.**

Motorola's XTS 1500 portable radio is the cost-effective, convenient, compact solution for public works and public utilities. This high-quality APCO Project 25 radio features two-way functionality in a durable, dependable unit that is very easy to use.

Available in the 700/800 frequency band, the XTS 1500 portable supports both APCO Project 16 and Project 25 operation. Use the analog functionality on the XTS 1500 or migrate to limited wide-area Project 25 operation. Look for VHF and UHF band additions in the coming year.

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